

Table 1-1. AHA 1983 Analytical Results

Drain Location	Location 1			Location 2			Location 3		
	Dissolved	Total	Recoverable	Dissolved	Total	Recoverable	Dissolved	Total	Recoverable
Sample Date	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83
Flow (cfs)	*	*	*	0.01	0.01	0.01	0.03	0.03	0.03
Temp (c)	10	10	10	9	9	9	14	14	14
pH (field)**	7.6	7.6	7.6	4.5	4.5	4.5	5.2	5.2	5.2
pH (lab)**	7.5	7.5	7.5	4.4	4.4	4.4	4.9	4.9	4.9
Cond. (field)***	5450	5450	5450	5200	5200	5200	6200	6200	6200
Cond. (lab)***	3400	3400	3400	3500	3500	3500	4500	4500	4500
TSS	216	216	216	45	45	45	238	238	238
TDS	3432	3432	3432	3406	3406	3406	4672	4672	4672
Diss.Oxygen	--	--	--	--	--	--	--	--	--
Ca	585	593	--	473	483	--	531	523	--
Mg	76	77	--	66	71	--	162	159	--
Na	245	237	--	266	277	--	441	410	--
K	5.7	6.9	--	8.3	9.8	--	7.6	7.8	--
HCO ₃	262	--	--	0	--	--	5.5	--	--
CO ₃	0	--	--	0	--	--	0	--	--
SO ₄	1685	--	--	1848	--	--	4348	--	--
Cl	83	--	--	97	--	--	136	--	--
F	5.4	--	--	4.6	--	--	9.8	--	--
NO ₃	0.1	--	--	3.1	--	--	7.5	--	--
As	0.007	0.01	--	<0.005	<0.005	--	0.005	0.005	--
B	0.1	--	0.1	0.2	--	0.2	0.7	--	0.8
Cd	<0.1	--	<0.1	<0.1	--	<0.1	<0.1	--	<0.1
Cr	<0.05	--	<0.05	<0.05	--	<0.05	<0.05	--	<0.05
Cu	0.3	--	0.5	5.4	--	4.8	3.5	--	3.8
Fe	0.2	--	3.7	41	--	38	51	--	51
Hg	<.0002	--	<.0002	0.001	--	0.001	<.0002	--	<.0002
Mn	8.9	--	10	7.7	--	7.7	37	--	34
Pb	<0.1	--	<0.1	<0.1	--	<0.1	<0.1	--	<0.1
Zn	0.3	--	<0.1	0.8	--	0.5	1.0	--	0.7
C-A balance	-4.8	--	--	-1.0	--	--	21.8	--	--
SAR	2.5	--	--	3.0	--	--	4.3	--	--

*Flow not measurable due to backwater effect caused by strong wind

Note: all units in mg/l unless noted otherwise.

** pH units

*** micromhos/cm

Table 1-1. AHA 1983 Analytical Results (Cont'd)

Drain Location	Location 4			Location 5		
	Dissolved	Total	Recoverable	Dissolved	Total	Recoverable
Sample Date	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83	03/30/83
Flow (cfs)	0.06	0.06	0.06	4.9	4.9	4.9
Temp (c)	20.5	20.5	20.5	10.5	10.5	10.5
pH (field)**	5.3	5.3	5.3	7.2	7.2	7.2
pH (lab)**	4.9	4.9	4.9	7.4	7.4	7.4
Cond. (field)***	5700	5700	5700	925	925	925
Cond. (lab)***	5100	5100	5100	640	640	640
TSS	82	82	82	2.7	2.7	2.7
TDS	5142	5142	5142	404	404	404
Diss.Oxygen	--	--	--	--	--	--
Ca	515	505	--	29	22	--
Mg	202	204	--	8.0	9.2	--
Na	550	521	--	73	73	--
K	9.3	9.3	--	4.8	4.9	--
HCO ₃	5.5	--	--	232	--	--
CO ₃	0	--	--	0	--	--
SO ₄	2826	--	--	130	--	--
Cl	165	--	--	29	--	--
F	13.2	--	--	0.9	--	--
NO ₃	0.4	--	--	<0.1	--	--
As	0.012	0.010	--	0.01	0.01	--
B	1.2	--	0.6	<0.1	--	<0.1
Cd	<0.1	--	<0.1	<0.1	--	<0.1
Cr	<0.05	--	<0.05	<0.05	--	<0.05
Cu	1.0	--	1.3	<0.1	--	<0.1
Fe	47	--	46	0.5	--	0.5
Hg	0.0015	--	0.003	<.0002	--	<.0002
Mn	36	--	36	0.2	--	0.3
Pb	0.5	--	<0.1	<0.1	--	<0.1
Zn	0.9	--	0.3	0.5	--	<0.1
C-A balance	-2.9	--	--	15.3	--	--
SAR	5.2	--	--	3.1	--	--

Note: All units in mg/l unless noted otherwise.

**pH units

***micromhos/cm

Table 3-1. Surface Water Analyte List

Parameter	Phase*	Method	Detection Limit	Units
Cations – Anions and General Parameters				
Alkalinity Total	Total & Dissolved	SM 2320 B	1.0	mg/l (as CaCO ₃)
Alkalinity/Bicarbonate	Total & Dissolved	SM 2320 B	1.0	mg/l (as CaCO ₃)
Alkalinity/Carbonate	Total & Dissolved	SM 2320 B	1.0	mg/l (as CaCO ₃)
Alkalinity/Hydroxide	Total & Dissolved	SM 2320 B	1.0	mg/l (as CaCO ₃)
Aluminum – ICP-OES	Total & Dissolved	EPA 200.7	0.05	mg/l
Arsenic – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Barium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Boron – ICP-OES	Total & Dissolved	EPA 200.7	0.05	mg/l
Cadmium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Calcium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Chloride – Ion Chromatography	Total & Dissolved	EPA 300.0	0.5	mg/l
Chromium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Cobalt – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Copper – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Fluoride - Ion Chromatography	Total & Dissolved	EPA 300.0	0.1	mg/l
Hardness, as CaCO ₃	Total & Dissolved	SM 2340 C	0.1	mg/l (as CaCO ₃)
Iron – ICP-OES	Total & Dissolved	EPA 200.7	0.05	mg/l
Lead – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Magnesium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Manganese – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Mercury – AA Cold Vapor	Total & Dissolved	EPA 245.1	0.0002	mg/l
Molybdenum -ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Nickel – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Nitrate – N- Ion Chromatography	Total & Dissolved	EPA 300.0	0.05	mg/l N
pH	Total & Dissolved	SM 4500 H+B	1	pH Units
pH - Temperature	Total & Dissolved	SM 4500 H+B	--	°C
Potassium – ICP-OES	Total & Dissolved	EPA 200.7	0.5	mg/l
Selenium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Sodium – ICP-OES	Total & Dissolved	EPA 200.7	0.1	mg/l
Sulfate – Ion Chromatography	Total & Dissolved	EPA 300.0	0.2	mg/l
Suspended Solids	Total & Dissolved	SM 2540 D	5	mg/l
Total Dissolved Solids	Total & Dissolved	SM 2540 C	10	mg/l
Turbidity	Total & Dissolved	SM 2130 B	0.1	NTU
Vanadium – ICP-MS	Total & Dissolved	EPA 200.8	0.001	mg/l
Zinc – ICP-MS	Total & Dissolved	EPA 200.8	0.005	mg/l

Table 1-2. NDEP 1999 Analytical Results

Sample I.D. Date of Collection Units	WSW-008 11/16/99 mg/L			WSW-009 11/16/99 mg/L			WSW-010 11/16/99 mg/L			WSW-011 11/16/99 mg/L		
Analyte	Result	Q	Com									
Aluminum (200.7)	0.2	U		0.2	U		0.2			26		
Antimony (200.8)	0.005	U		0.005	U		0.005	U		0.005	U	J D
Arsenic (200.8)	0.02			0.01	J	A	0.01	J	A	0.1		
Barium (200.8)	0.077			0.066			0.071			1.1	J	C
Beryllium (200.2)	0.005	U										
Boron (200.7)	1			0.5			0.6			1.1		
Cadmium (200.8)	0.005	U		0.005	U		0.005	U		0.004	J	A
Calcium (200.7)	75			48			56			200		
Chromium (200.7)	0.01	U		0.01	U		0.01	U		0.02		
Cobalt (200.8)	0.005	U		0.005	U		0.005	U		0.043		
Copper (200.8)	0.005			0.003	J	A	0.005			.017		
Iron (200.7)	0.3			0.2			0.3			30		
Lead (200.8)	0.005	U		0.005	U		0.005	U		0.018		
Magnesium (200.7)	18			11			13			27		
Manganese (200.8)	0.4			0.23			0.14			2.7		
Mercury (245.1)	0.0002	U		0.0002	U		0.0002	U		0.0001	J	A
Molybdenum (200.8)	0.018			0.011			0.014			0.011		
Nickel (200.7)	0.05	U		0.05	U		0.05	U		0.03	J	A
Potassium (200.7)	4	J	A	4	J	A	5			20		
Selenium (200.9)	0.01	U		0.05	U	B	0.01	U		0.05	U	B
Silver (200.8)	0.005	U										
Sodium (200.7)	120			60			77			190		
Thallium (200.7)	0.005	U										
Vanadium (200/7)	0.02	U		0.02	U		0.02	U		0.19		
Zinc (200.8)	0.02	U		0.02	U		0.02	U		0.35		

Com - Comments refer to the corresponding section in the report narrative for each letter.

N/A - Not Applicable.

N/R - No Required.

Q - Refer to data qualifiers.

U- The parameter was analyzed for, but was not detected; the associated value is the sample detection limit, adjusted for dilution, if any.

J - The associated value is an estimated quantity.

Table 3-2. Soil/Sediment Analyte List

Parameter	Phase	Method	Detection Limit	Units
Cations - Anions and General Parameters				
Aluminum - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.05	mg/Kg
Arsenic - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Barium - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Boron - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.05	mg/Kg
Cadmium - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Calcium - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.1	mg/Kg
Chromium - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Cobalt - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Copper - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Iron - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.05	mg/Kg
Lead - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Magnesium - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.1	mg/Kg
Manganese - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Mercury - AA Cold Vapor	Soil/Whole Rock	SW - 846 7471	0.05	mg/Kg
Molybdenum ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Nickel - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Potassium - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.5	mg/Kg
Selenium - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Sodium - ICP-OES	Soil/Whole Rock	SW - 846 6010A	0.1	mg/Kg
Total Recoverable Metals - Acid Digestion	Soil/Whole Rock	SW - 846 3050A	--	--
Vanadium - ICP-MS	Soil/Whole Rock	SW - 846 6020	1	mg/Kg
Zinc - ICP-MS	Soil/Whole Rock	SW - 846 6020	10	mg/Kg